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UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/791,945	03/03/2004	Li Fung Chang	BP3012	4145

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34399	7590	08/23/2005	TORRES, JUAN A

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ART UNIT	PAPER NUMBER
2631	

DATE MAILED: 08/23/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 10/03)

	Application No.	Applicant(s)
	10/791,945	CHANG ET AL.
Office Action Summary	Examiner	Art Unit	
	Juan A. Torres	2631	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>03 March 2004</u>.

2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-31* is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-31* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☒ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on <u>03 March 2004</u> is/are: a)☐ accepted or b)☒ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All   b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☒ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
    Paper No(s)/Mail Date _____.

4)☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____.

5)☐ Notice of Informal Patent Application (PTO-152)

6)☐ Other: _____.

DETAILED ACTION

Drawings

Figure 4 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). Corrected drawings in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference character(s) not mentioned in the description:

a) FIG. 3 reference number 338;

b) FIG. 10 reference number 1006.

Corrected drawing sheets in compliance with 37 CFR 1.121(d), or amendment to the specification to add the reference character(s) in the description in compliance with 37 CFR 1.121(b) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37

CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be

notified and informed of any required corrective action in the next Office action. The

objection to the drawings will not be held in abeyance.

Specification

The disclosure is objected to because of the following informalities:

a) In page 3 line 12 the recitation "200 KHz" is improper; it is suggested to be

changed to "200 kHz".

b) In page 11 line 15 the recitation "MMI drivers" is improper because it is not

defined what MMI means.

c) In page 24 line 3 the recitation "906" is improper; it is suggested to be changed

to "908" (see figure 9).

Appropriate correction is required.

Claim Objections

Claim 8 is objected to because of the following informalities: in line 4 of claim 8

the recitation "if required" is improper, because "if", render indefiniteness to the claim; it

is suggested to be changed to "when required". Appropriate correction is required.

Claim 23 is objected to because of the following informalities: in line 4 of claim

23 the recitation "if required" is improper, because "if", render indefiniteness to the

claim; it is suggested to be changed to "when required". Appropriate correction is

required.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that

form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1, 3-5, 7, 11, 16, 18-20, 22, 26 and 29 are rejected under 35

U.S.C. 102(b) as being anticipated by Pukkila (US 20010017904 A1).

As per claims 1 and 16 Pukkila discloses a method for performing Incremental

Redundancy (IR) operations in a wireless receiver comprising receiving an analog

signal corresponding to a data block (figure 2 block 201 and figure 3 block 301

paragraphs [0024] and [0027]); sampling the analog signal to produce samples (figure 2

block 203 and figure 3 block 301 paragraphs [0024]-[0025] and [0027]); equalizing the

samples to produce soft decision bits of the data block (figure 2 block 205 and figure 3

block 306 paragraphs [0025] and [0028]-[0029] and [0035]); configuring, by a system

processor of the wireless receiver, a plurality of IR processing module registers (figure 2

block 205' and figure 3 blocks 305-318 paragraphs [0024]-[0031]); initiating, by the

system processor of the wireless receiver, operation of an IR processing module of the

wireless receiver (figure 2 block 205' and figure 3 blocks 305-318 paragraphs [0024]-

[0031]); and accessing, by the IR processing module, the plurality of IR processing

module registers (figure 2 block 205' and figure 3 blocks 305-318 paragraphs [0024]-[0031]); and performing, by the IR processing module, IR operations on the soft decision bits of the data block in an attempt to correctly decode the data block (figure 2 block 205' and figure 3 blocks 305-318 paragraphs [0024]-[0031] and [0035]).

As per claims 3 and 18 Pukkila discloses claims 1 and 16. Pukkila also discloses that the plurality of IR processing module registers comprises the system processor writing the soft decision bits of the data block to the plurality of IR processing module registers (figure 2 block 204 and figure 3 block 302 paragraphs [0024]-[0031] and [0035]).

As per claims 4 and 19 Pukkila discloses claims 1 and 16. Pukkila also discloses that the system processor writing the soft decision bits of the data block to a memory accessible by the IR processing module (figure 2 block 204 and figure 3 block 302 paragraphs [0024]-[0031] and [0035]).

As per claims 5 and 20 Pukkila discloses claims 4 and 19. Pukkila also discloses determining that an additional copy of the data block is stored in memory (figure 2 block 204 and figure 3 block 302 paragraphs [0024]-[0031]); retrieving soft decision bits of the additional copy of the data block (figure 2 block 204 and figure 3 blocks 304 paragraphs [0024]-[0031] and [0035]); soft combining the soft decision bits of the additional copy of the data block with the soft decision bits of the data block to produce combined soft decision bits of the data block (figure 2 block 211 and figure 3 block 307 paragraphs [0024]-[0031] and [0035]); and decoding the combined soft decision bits of the data block (figure 2 block 207 and figure 3 block 309 paragraphs [0024]-[0031] and [0035]).

As per claims 7 and 22 Pukkila and Pukkila disclose claims 5 and 20. Pukkila also discloses the IR processing module identifying an IR mode of the additional copy of the data block stored in memory (figure 2 block 204 and figure 3 block 302 paragraphs [0024]-[0031]).

As per claims 11 and 26 Pukkila and Pukkila disclose claims 5 and 20. Pukkila also discloses storing the combined soft decision bits of the data block in memory for later use (figure 2 block 204 and figure 3 block 302 paragraphs [0024]-[0031] and [0035]).

As per claim 29 Pukkila discloses claim 16. Pukkila also discloses that the system processor is further operable to store the soft decision bits of the data block in an IR memory (figure 2 block 204 and figure 3 block 302 paragraphs [0024]-[0031] and [0035]).

Claims 1-7, 9-11, 13-22, 24-26 and 28-31 are rejected under 35 U.S.C. 102(e) as being anticipated by Parolari (US 20040081248 A1).

As per claims 1 and 16 Parolari discloses a method for performing Incremental Redundancy (IR) operations in a wireless receiver comprising receiving an analog signal corresponding to a data block (figure 5 antenna paragraph [0112]); sampling the analog signal to produce samples (figure 5 block A/D paragraph [0112]); equalizing the samples to produce soft decision bits of the data block (figure 5 block MLSE paragraph [0112]); configuring, by a system processor of the wireless receiver, a plurality of IR processing module registers (figure 5 block control processor paragraph [0112]); initiating, by the system processor of the wireless receiver, operation of an IR

processing module of the wireless receiver (figure 5 block control processor paragraph

[0112]); and accessing, by the IR processing module, the plurality of IR processing

module registers (figure 5 block control processor paragraph [0112]); and performing,

by the IR processing module, IR operations on the soft decision bits of the data block in

an attempt to correctly decode the data block (figure 5 block channel decoder and

control processor paragraph [0112]).

As per claims 2 and 17 Parolari discloses claims 1 and 16. Parolari also

discloses that the data block comprises a complete link layer data-block (figure 5

paragraphs [0011] and [0112]).

As per claims 3 and 18 Parolari discloses claims 1 and 16. Parolari also

discloses that the plurality of IR processing module registers comprises the system

processor writing the soft decision bits of the data block to the plurality of IR processing

module registers (figure 5 control processor paragraph [0112]).

As per claims 4 and 19 Parolari discloses claims 1 and 16. Parolari also

discloses that the system processor writing the soft decision bits of the data block to a

memory accessible by the IR processing module (figure 5 control processor, channel

decoder and redundancy incremental buffer paragraph [0112]).

As per claims 5 and 20 Parolari discloses claims 4 and 19. Parolari also

discloses determining that an additional copy of the data block is stored in memory

(abstract figure 5 control processor paragraphs [0051] and [0061] type II IR); retrieving

soft decision bits of the additional copy of the data block (abstract figure 5 control

processor paragraphs [0051] and [0061] type II IR); soft combining the soft decision bits

of the additional copy of the data block with the soft decision bits of the data block to produce combined soft decision bits of the data block (abstract, paragraphs [0051], [0061], and [0074]; figure 5 paragraphs [0112] and [0113]); and decoding the combined soft decision bits of the data block (figure 5 block channel decoder and IR buffer paragraph [0112]).

As per claims 6 and 21 Parolari disclose claims 5 and 20. Parolari also discloses determining that an additional copy of the data block is stored in memory is based upon type I IR memory contents (paragraph [0051], [0061] and [0074]); and retrieving soft decision bits of the additional copy of the data block includes accessing type II IR memory (paragraph [0051], [0061] and [0074]).

As per claims 7 and 22 Parolari and Pukkila disclose claims 5 and 20. Parolari also discloses the IR processing module identifying an IR mode of the additional copy of the data block stored in memory (paragraph [0051]).

As per claims 9 and 24 Parolari and Pukkila disclose claims 5 and 20. Parolari also discloses assigning different weights to each of the data block and the additional copy of the data block for soft combining (abstract, paragraph [0073], [0143], [0144], [0154], [0156], [0175] and [0182]).

As per claims 10 and 25 Parolari and Pukkila disclose claims 9 and 24. Parolari also discloses that the weights are assigned to the data block and to the additional copy of the data block based upon respective measured signal qualities ([0073], [0074] and [0076]).

As per claims 11 and 26 Parolari and Pukkila disclose claims 5 and 20. Parolari also discloses storing the combined soft decision bits of the data block in memory for later use ([0073] and [0074]).

As per claims 13 and 28 Parolari discloses claims 1 and 16. Parolari also discloses storing the soft decision bits of the data block in IR memory (figure 5 paragraph [0112]).

As per claims 14 and 30 Parolari discloses claims 1 and 16. Parolari also discloses failing to correctly decode a header of the data block (figure 5 paragraph [0112] and [0163]); and discarding the soft decision bits of the data block (figure 5 paragraph [0112] and [0163]).

As per claims 15 and 31 Parolari discloses claims 1 and 16. Parolari also discloses each symbol of the data block is represented by four punctured soft decision bits; and each symbol of the data block is also represented by five depunctured soft decision bits (paragraph [0074] and tables 1-4).

As per claim 29 Parolari discloses claim 16. Parolari also discloses that the system processor is further operable to store the soft decision bits of the data block in an IR memory (figure 5 paragraph [0112]).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 8, 12, 23 and 27 are rejected under 35 U.S.C. 103(a) as being

unpatentable over Parolari as applied to claims 1 and 16 above, and further in view of

Ramesh (US 6909758 B2).

As per claims 8 and 23 Parolari and Pukkila disclose claims 7 and 22. Parolari

also discloses identifying a puncturing pattern of the additional copy of the data block

stored in memory (paragraph [0074]). Parolari doesn't specifically disclose the

inherently depuncturing process of depuncturing the copy of the data block stored in

memory when required (paragraph [0074]). Ramesh discloses depuncturing the copy of

the data block stored in memory (figure 2 block 240 column 5 lines 41-51 and figure 5

block 510 column 7 lines 21-32). Parolari and Ramesh are analogous art because they

are from the same field of endeavor. At the time of the invention, it would have been

obvious to a person of ordinary skill in the art to incorporate the decoding technique

disclosed by Ramesh in the link adaptation process disclosed by Parolari. The

suggestion/motivation for doing so would have been to depuncturing a punctured data

block (Ramesh column 4 lines 30-34). Therefore, it would have been obvious to

combine Parolari and Ramesh to obtain the invention as specified in claims 8 and 23.

As per claims 12 and 27 Parolari discloses claims 1 and 16. Parolari also

discloses decoding the soft decision bits of the data block to produce a decoded header

(figures 4-5 channel decoder paragraphs [0024]-[0026] and [0074]); and identifying a

Modulation and Coding Scheme (MCS) mode and puncturing pattern of the data block

from the decoded header (paragraphs [0074]-[0079]). Parolari doesn't specifically

disclose the inherently depuncturing process, depuncturing the soft decision bits of the

data block based upon the MCS mode and puncturing pattern to produce depunctured

soft decision bits; and decoding the depunctured soft decision bits. Ramesh discloses

depuncturing the soft decision bits of the data block based upon the MCS mode and

puncturing pattern to produce depunctured soft decision bits (figure 2 block 240 column

5 lines 41-51 and figure 5 block 510 column 7 lines 21-32); and decoding the

depunctured soft decision bits (figure 2 block 240 column 4 lines 22-34 and figure 5

block 580 column 8 lines 23-36). Parolari and Ramesh are analogous art because they

are from the same field of endeavor. At the time of the invention, it would have been

obvious to a person of ordinary skill in the art to incorporate the decoding technique

disclosed by Ramesh in the link adaptation process disclosed by Parolari. The

suggestion/motivation for doing so would have been to depuncturing a punctured data

block (Ramesh column 4 lines 30-34). Therefore, it would have been obvious to

combine Parolari and Ramesh to obtain the invention as specified in claims 12 and 27.

Double Patenting

Claims 1, 12, 27, 16, 1, 12, and 31 of this application, conflict with claims 1, 6, 7,

14, 27, 28 and 34 respectively of Application No. 10/731,803. 37 CFR 1.78(b) provides

that when two or more applications filed by the same applicant contain conflicting

claims, elimination of such claims from all but one application may be required in the

absence of good and sufficient reason for their retention during pendency in more than

one application. Applicant is required to either cancel the conflicting claims from all but

one application or maintain a clear line of demarcation between the applications. See

MPEP § 822.

The nonstatutory double patenting rejection is based on a judicially created

doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the

unjustified or improper timewise extension of the "right to exclude" granted by a patent

and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11

F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225

USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA

1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970);and, *In re Thorington,*

418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be

used to overcome an actual or provisional rejection based on a nonstatutory double

patenting ground provided the conflicting application or patent is shown to be commonly

owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a

terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with

37 CFR 3.73(b).

Claims 1, 12, 27, 16, 1, 12, and 31 are provisionally rejected under the judicially

created doctrine of obviousness-type double patenting as being unpatentable over

claims 1, 6, 7, 14, 27, 28 and 34 respectively of copending Application No. 10/731,803.

Although the conflicting claims are not identical, they are not patentably distinct from

each other because claims are substantially the same.

As per claims 1 (10/731803) and 1 (10/791945) application with serial No.

10/731803 claims "A system for implementing Incremental Redundancy (IR) operations

in a wireless receiver comprising: a baseband processor that is operable to receive analog signals corresponding to a data block and to sample the analog signal to produce samples; an equalizer that is operable to receive the samples from the baseband processor, to equalize the samples, and to produce soft decision bits of the data block; a system processor that is operable to receive the soft decision bits and to initiate IR operations; and an IR processing module operably coupled to the system processor that is operable to receive the soft decision bits and to perform IR operations on the soft decision bits" and application with serial No. 10/791945 claims "A method for performing Incremental Redundancy (IR) operations in a wireless receiver comprising: receiving an analog signal corresponding to a data block; sampling the analog signal to produce samples; equalizing the samples to produce soft decision bits of the data block; configuring, by a system processor of the wireless receiver, a plurality of IR processing module registers; initiating, by the system processor of the wireless receiver, operation of an IR processing module of the wireless receiver; and accessing, by the IR processing module, the plurality of IR processing module registers; and performing, by the IR processing module, IR operations on the soft decision bits of the data block in an attempt to correctly decode the data block". It is obvious that both applications claim essentially the same limitations, receiving, sampling, equalizing, IR processing (initialization and accessing is inherent to processing).

As per claim 6 (10/731803) and 12 (10/791945), application with serial No. 10/731803 claims "the soft decision bits of the data block are stored in IR memory; a determination is made that a Modulation and Coding Scheme (MCS) mode and

puncturing pattern of the subsequently received copy of the data block and a MCS mode of the data block are compatible; soft decision bits of the subsequently received copy of the data block are combined with soft decision bits of the data block to produce combined soft decision bits; the combined soft decision bits are depunctured; and the IR processing module decodes the depunctured combined soft decision bits" and application with serial No. 10/791945 claims "decoding the soft decision bits of the data block to produce a decoded header; and identifying a Modulation and Coding Scheme (MCS) mode and puncturing pattern of the data block from the decoded header; depuncturing the soft decision bits of the data block based upon the MCS mode and puncturing pattern to produce depunctured soft decision bits; and decoding the depunctured soft decision bits". It is obvious that both applications claim the same limitations, identify modulation, depuncture, and decoding.

As per claims 7 (10/731803) and 27 (10/791945), application with serial No. 10/731803 claims "a determination is made that a Modulation and Coding Scheme (MCS) mode of the subsequently received copy of the data block and a MCS mode and puncturing pattern of the data block are compatible; the soft decision bits of the data block are depunctured to produce first depunctured soft decision bits; the soft decision bits of data of the subsequently received copy of the data block are depunctured to produce second depunctured soft decision bits; the first depunctured soft decision bits and the second depunctured soft decision bits are combined to produce combined depunctured soft decision bits; and the IR processing module is operable to decode the combined depunctured soft decision bits." and application with serial No. 10/791945

claims "decode the soft decision bits of the data block to produce a decoded header; and identify a Modulation and Coding Scheme (MCS) mode and puncturing pattern of the data block from the decoded header; depuncture the soft decision bits of the data block based upon the MCS mode and puncturing pattern to produce depunctured soft decision bits; and decode the depunctured soft decision bits". It is obvious that both applications claim the same limitations, identify modulation, depuncture, and decoding.

As per claims 14 (10/731803) and 16 (10/791945), application with serial No. 10/731803 claims "A system for implementing Incremental Redundancy (IR) operations in a wireless receiver comprising: at least one processing device that is operable to receive an analog signal corresponding to a data block, to sample the analog signal to produce samples, to equalize the samples, to produce soft decision bits of the data block, and to initiate IR operations; and an IR processing module operably coupled to the at least one processing device that is operable to receive the soft decision bits and to perform IR operations on the soft decision bits" and application with serial No. 10/791945 claims "A system for implementing Incremental Redundancy (IR) operations in a wireless receiver comprising: a baseband processor that is operable to receive analog signals corresponding to a data block and to produce samples of the analog signals; an equalizer that is operable to receive the samples from the baseband processor, to equalize the samples, and to produce soft decision bits of the data block; a system processor that is operable to receive the soft decision bits of the data block; a plurality of IR processing module registers communicatively coupled to the system processor; an IR processing module communicatively coupled to the system processor

and to the plurality of IR processing module registers; wherein the system processor is

operable to configure the plurality of IR processing module registers and to initiate

operation of the IR processing module of the wireless receiver; and wherein the IR

processing module is operable to access the plurality of IR processing module registers,

to receive the soft decision bits of the data block, and to perform IR operations on the

soft decision bits of the data block in an attempt to correctly decode the data block". It is

obvious that both applications claim essentially the same limitations, receiving,

sampling, equalizing, IR processing (initialization and accessing is inherent to

processing).

As per claims 27 (10/731803) and 1 (10/791945) application with serial No.

10/731803 claims "A method for performing Incremental Redundancy (IR) operations in

a wireless receiver comprising: receiving an analog signal corresponding to a data

block; sampling the analog signal to produce samples; equalizing the samples to

produce soft decision bits of the data block; transferring the soft decisions of the data

block to an IR processing module; and the IR processing module receiving the soft

decision bits of the data block and performing IR operations on the soft decision bits of

the data block in an attempt to correctly decode the data block" and application with

serial No. 10/791945 claims "A method for performing Incremental Redundancy (IR)

operations in a wireless receiver comprising: receiving an analog signal corresponding

to a data block; sampling the analog signal to produce samples; equalizing the samples

to produce soft decision bits of the data block; configuring, by a system processor of the

wireless receiver, a plurality of IR processing module registers; initiating, by the system

processor of the wireless receiver, operation of an IR processing module of the wireless

receiver; and accessing, by the IR processing module, the plurality of IR processing

module registers; and performing, by the IR processing module, IR operations on the

soft decision bits of the data block in an attempt to correctly decode the data block". It

is obvious that both applications claim essentially the same limitations, receiving,

sampling, equalizing, IR processing (initialization and accessing is inherent to

processing).

As per claims 28 (10/731803) and 12 (10/791945) application with serial No.

10/731803 claims "decoding the soft decision bits of the data block to produce a

decoded header; and determining a Modulation and Coding Scheme (MCS) mode and

puncturing pattern of the data block from the decoded header; depuncturing the soft

decision bits of the data block based upon the MCS mode and puncturing pattern to

produce depunctured soft decision bits; and the IR processing module decoding the

depunctured soft decision bits" and application with serial No. 10/791945 claims

"decoding the soft decision bits of the data block to produce a decoded header; and

identifying a Modulation and Coding Scheme (MCS) mode and puncturing pattern of the

data block from the decoded header; depuncturing the soft decision bits of the data

block based upon the MCS mode and puncturing pattern to produce depunctured soft

decision bits; and decoding the depunctured soft decision bits". It is obvious that both

applications claim the same limitations, identify modulation, depuncture, and decoding.

As per claims 34 (10/731803) and 31 (10/791945) application with serial No.

10/731803 claims "each symbol of the data block is represented by four punctured soft

decision bits; and each symbol of the data block is also represented by five depunctured soft decision bits" and application with serial No. 10/791945 claims "each symbol of the data block is represented by four punctured soft decision bits; and each symbol of the data block is also represented by five depunctured soft decision bits". It is obvious that both applications claim the same limitations, identify modulation, depuncture, and decoding. It is obvious that both applications claim the same limitations.

This is a <u>provisional</u> obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Juan A. Torres whose telephone number is (571) 272-3119. The examiner can normally be reached on Monday-Friday 9:00 AM - 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mohammad H. Ghayour can be reached on (571) 272-3021. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the

Patent Application Information Retrieval (PAIR) system. Status information for

published applications may be obtained from either Private PAIR or Public PAIR.

Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see http://pair-direct.uspto.gov. Should

you have questions on access to the Private PAIR system, contact the Electronic

Business Center (EBC) at 866-217-9197 (toll-free).

Juan Alberto Torres
08-09-2005

M. G/-

MOHAMMED GHAYOUR
SUPERVISORY PATENT EXAMINER